

Shawnee County

Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/28/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 31 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Shawnee County economy.¹

These 31 sectors have a total direct output of approximately **\$1.83 billion** and support **4,808 jobs** in Shawnee County. Running the model for all 31 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Shawnee County Economy					
Contribution Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵
Direct Effect	4808.4	4.07%	\$430,260,277	4.22%	\$1,829,041,554
Indirect Effect	2402.4	2.03%	\$280,287,316	2.75%	\$456,939,324
Induced Effect	1896.8	1.60%	\$150,354,299	1.47%	\$259,444,029
Total Effect	9107.6	7.70%	\$860,901,892	8.44%	\$2,545,424,906

As shown in the above table, agriculture, food, and food processing sectors support **9,108 jobs**, or **7.70%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 31 agriculture, food, and food processing sectors is approximately **\$860.9 million**, or **8.44% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the all other food manufacturing sector is the top employer with **1,349 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Shawnee County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
All other food manufacturing	1,348.9	\$454,551,666
Wholesale trade	597.2	\$147,128,650
Other snack food manufacturing	533.1	\$265,080,353
Landscape and horticultural services	503.8	\$38,326,233
Dog and cat food manufacturing	433.1	\$593,930,002
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	331.3	\$22,482,773
Veterinary services	309.3	\$37,663,887
Bread and bakery product, except frozen, manufacturing	263.8	\$35,152,803
Support activities for agriculture and forestry	217.9	\$7,402,091
Truck transportation	211.5	\$33,924,442

The dog and cat food manufacturing sector directly contributes approximately **\$593.9 million** to the Shawnee County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Dog and cat food manufacturing	433.1	\$593,930,002
All other food manufacturing	1,348.9	\$454,551,666
Other snack food manufacturing	533.1	\$265,080,353
Wholesale trade	597.2	\$147,128,650
Chocolate and confectionery manufacturing from cacao beans	163.3	\$110,634,918
Animal, except poultry, slaughtering	150.0	\$102,685,245
Management of companies and enterprises	209.3	\$59,942,230
Other animal food manufacturing	32.9	\$44,101,956
Landscape and horticultural services	503.8	\$38,326,233
Veterinary services	309.3	\$37,663,887

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Shawnee County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	34.7	\$22,040,702.82
Grain farming	97.4	\$21,299,627.30
Vegetable and melon farming	0.8	\$152,618.13
Fruit farming	2.2	\$203,071.71
Tree nut farming	0.0	\$15.85
Greenhouse, nursery, and floriculture production	20.5	\$3,394,708.40
All other crop farming	138.5	\$6,513,422.49
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	331.3	\$22,482,772.83
Poultry and egg production	0.5	\$345,829.16
Animal production, except cattle and poultry and eggs	37.0	\$2,855,506.66
Commercial logging	2.4	\$62,394.21
Commercial hunting and trapping	2.5	\$47,702.41
Support activities for agriculture and forestry	217.9	\$7,402,091.03
Dog and cat food manufacturing	433.1	\$593,929,992.68
Other animal food manufacturing	32.9	\$44,101,955.41
Chocolate and confectionery manufacturing from cacao beans	163.3	\$110,634,918.21
Confectionery manufacturing from purchased chocolate	19.2	\$6,354,227.54
Animal, except poultry, slaughtering	148.4	\$101,570,678.71
Bread and bakery product, except frozen, manufacturing	263.8	\$35,152,801.51
Frozen cakes and other pastries manufacturing	7.5	\$1,183,343.53
Other snack food manufacturing	533.1	\$265,080,352.78
Coffee and tea manufacturing	27.7	\$14,936,385.15
All other food manufacturing	1348.9	\$454,551,666.26
Breweries	5.7	\$2,108,169.32
Wineries	7.1	\$1,918,650.63
Other leather and allied product manufacturing	6.7	\$576,798.92
Farm machinery and equipment manufacturing	23.1	\$9,494,655.61
Food product machinery manufacturing	21.7	\$6,734,474.66
All other industrial machinery manufacturing	67.5	\$17,921,890.26
Veterinary services	309.3	\$37,663,887.02
Landscape and horticultural services	503.8	\$38,326,232.91

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Shawnee County, the retail sector was omitted.